

WHAT IS CLAIMED IS:

1. A system for transfer of images produced by an ink jet printer to a textile substrate, comprising a backing material and mounted thereon at least one melt transfer ink absorption layer with a matrix comprising at least one meltable polymer material into which fine particles of a filler capable of ink absorption have been embedded.

2. A transfer system according to Claim 1, wherein the meltable polymer material is selected from the group consisting of polyesters, ethylene-vinyl acetate copolymers, polyamides, nylon, epoxides, polyacrylates, styrene-butadiene copolymers, nitrile rubber, polyvinyl chloride, polyvinyl acetate, ethylene-acrylate copolymers and ethylene-acrylate copolymers in combination with polyester.

3. A transfer system according to Claim 1, wherein the polymer material has a melting range of from 100 to 250°C.

4. A transfer system according Claim 1, wherein the filler is selected from organic and inorganic materials and comprises at least one of formaldehyde resins, melamine-formaldehyde resins, polyacrylates, polymethacrylates, polyurethanes, crosslinked polyvinylpyrrolidone, polyamides, silicon dioxide, Al₂O₃, TiO₂, BaSO₄, and aluminosilicates.

5. A transfer system according to Claim 1, wherein the filler is an organic filler and is present in particle sizes of from 1 to 50 µm, or the filler is an inorganic filler and is present in particle sizes of from 1 to 50 µm.

6. A transfer system according to Claim 1, wherein matrix material and filler are present in a matrix material/filler weight ratio of from 1:1 to 1:10.

7. A transfer system according to Claim 1, wherein the thickness of the melt transfer ink absorption layer is from 20 to 100 μm .

8. A transfer system according to Claim 1, wherein the melt transfer ink absorption layer comprises a plurality of layers.

9. A transfer system according to Claim 8, wherein in the melt transfer ink absorption layer there is a concentration gradient of the filler and/or of one or more of the matrix materials used.

10. A transfer system according to Claim 1, wherein the backing material has adhesive properties, which material is selected from the group consisting of silicone paper, pseudosilicone paper, wax paper, baking paper and polyesters.

11. A transfer system according to Claim 10, wherein the backing material has a heat resistance of at least 250°C.

12. A transfer system according to Claim 1, further comprising a non-meltable dulling material.

13. A transfer system according to Claim 12, wherein the dulling material is located on the surface of the melt transfer ink absorption layer that faces the backing material, or is located on the surface of the melt transfer ink absorption layer that faces away from the backing material.

14. A transfer system according to Claim 12, wherein the dulling material is in the surface of the melt transfer ink absorption layer or is mounted thereon in an extra layer.

15. A transfer system according to Claim 1, wherein the backing material has a rough release surface so that following peel removal a rough image surface is formed.

16. A process for producing a transfer system according to Claim 1, comprising: mixing the meltable polymer and the filler in an appropriate solvent; applying the mixture to the backing material; and drying the mixture.

17. A process for applying an image produced by an ink jet printer to a textile substrate, comprising the following steps:

- mirror-inverted print applying an image to the transfer system according to Claim 1;
- placing the system onto the textile substrate by the melt transfer ink absorption layer;
- heating the transfer system to a temperature at which the matrix material melts; and
- optionally, implementation of a hot peel.

18. A process for applying an image produced by an ink jet printer to a textile substrate, comprising the following steps:

- right-sided print applying an image produced by a computer to the transfer system according to Claim 1;
- peel removing the backing material,
- placing the system onto the textile substrate by that side of the melt transfer ink absorption layer on which the backing material was;
- heating the transfer system to a temperature at which the matrix material melts; and
- optionally, implementation of a hot peel.

19. A textile substrate produced by the process according to Claim 17.

20. A textile substrate produced by the process according to
Claim 18.

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